

Attorney Docket No. MOTP:102US
U.S. Patent Application No. 10/695,360
Reply to Office Action of February 28, 2006
Date: June 8, 2006

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is Claimed:

1. (currently amended) An electromagnetic fuel pump, comprising:
 - a pump;
 - electronic switching circuitry for controlling an electromagnetic coil operatively arranged to operate said pump;
 - a housing arranged to house said pump and said coil, said housing comprising an integral inlet port and a structural electromagnetic (EM) hardening means; and,
 - an end cap with an integral outlet port.
2. (original) The electromagnetic fuel pump recited in Claim 1 further comprising a drive circuit housed within said housing, said drive circuit operatively arranged to drive said coil.
3. (original) The electromagnetic fuel pump recited in Claim 2, wherein said drive circuit further comprises a Zener diode operatively arranged as a surge suppressor.
4. (original) The electromagnetic fuel pump recited in Claim 1, wherein said housing further comprises at least one mounting flange.
5. (original) The electromagnetic fuel pump recited in Claim 1, wherein said housing further comprises a molded body.
6. (original) The electromagnetic fuel pump recited in Claim 1, wherein said inlet port further comprises an integral nipple, operatively arranged for coupling with an inlet fuel hose.
7. (original) The electromagnetic fuel pump recited in Claim 1, wherein said inlet port further comprises a threaded insert.
8. (original) The electromagnetic fuel pump recited in Claim 1, wherein said inlet port further comprises a bore; wherein said bore is operatively arranged for adhesion to an inlet fuel hose coupling nipple.
9. (original) The electromagnetic fuel pump recited in Claim 1, wherein said outlet port further comprises an integral nipple, operatively arranged for coupling with an outlet fuel hose.

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10. (original) The electromagnetic fuel pump recited in Claim 1, wherein said outlet port further comprises a threaded insert.

11. (original) The electromagnetic fuel pump recited in Claim 1, wherein said outlet port further comprises a bore; wherein said bore is operatively arranged for adhesion to an outlet fuel hose coupling nipple.

12. (cancelled)

13. (currently amended) The electromagnetic fuel pump recited in Claim 12 1 wherein said structural EM hardening means comprises a metal shield within said housing.

14. (original) The electromagnetic fuel pump recited in Claim 13 wherein said metal shield comprises a metal screen within said housing.

15. (original) The electromagnetic fuel pump recited in Claim 13 wherein said metal shield comprises a metallic conformal coating within said housing.

16. (previously presented) The electromagnetic fuel pump recited in Claim 1 further comprising a printed circuit board within said housing and a bobbin assembly fixedly secured to said printed circuit board, and wherein said electronic switching circuitry is mounted on said circuit board and said electromagnetic coil is mounted on said bobbin assembly.

17. (original) The electromagnetic fuel pump recited in claim 16 wherein said bobbin assembly comprises a pair of opposing flanges, and one of said flanges is fixedly secured to said printed circuit board.

18. (original) The electromagnetic fuel pump recited in claim 17 wherein one of said flanges is fixedly secured to said printed circuit board and the other said flange is arranged to rest upon said printed circuit board.

19. (currently amended) An electromagnetic fuel pump, comprising:
a pump;
electronic switching circuitry for controlling an electromagnetic coil operatively arranged to operate said pump; and,
a two piece housing operatively arranged to house said pump and said coil, said two piece housing is comprising a first material and a structural electromagnetic (EM) hardening means,

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wherein a first piece of said two piece housing comprises a threaded insert inlet port and a second piece of said two piece housing comprises a threaded insert outlet port; said threaded insert inlet and outlet ports comprising a second material and wherein said inlet port and said outlet port are adapted for threadably inserting and removing threaded nipples.

20. (new) An electromagnetic fuel pump, comprising:

a pump;

electronic switching circuitry for controlling an electromagnetic coil operatively arranged to operate said pump;

a housing arranged to house said pump and said coil, said housing comprising an integral inlet port, wherein said inlet port and said housing are formed from a first single piece, said inlet port comprises a first integral nipple, and said inlet port is operatively arranged for coupling with a first fuel hose; and,

an end cap with an integral outlet port, wherein said outlet port and said end cap are formed from a second single piece, said outlet port comprises a second integral nipple, and said outlet port is operatively arranged for coupling with a second fuel hose, wherein said housing and said end cap are made from molded plastic.